AUTHOR INDEX TO VOLUME 62

Amaya, J., 28

Baserinia, A. R., 94

Chen, Q., 419

Das, S., 399
Doshi, J. B., 264
Duchaine, F., 28

El Khoury, K., 439

Fayssal, I., 341

Ghannam, B., 439
Guo, Z., 203, 223

Hetmaniok, E., 462
Huang, C., 71
Hunter, B., 203, 223
Hurtado, F. S. V., 113
Hwang, Y.-H., 315

Jin, M., 419

Kribèche, A., 50
Kumar, N., 264

Lakkis, I., 370
Lygidakis, G. N., 289

Maliska, C. R., 113
Masuri, S., 141, 157
Mathur, S. R., 399
Mathur, S., 1
Modest, M. F., 181
Moukalled, F., 341
Murthy, J. Y., 1, 399

Nemer, M., 439
Nikolos, I. K., 289
Nowak, I., 462

Patankar, S. V., 89
Poitou, D., 28

Słota, D., 462
Sellier, M., 141, 157
Sheu, T. W. H., 71
Silva, A. D., 50
Singh, S., 264
Sophy, T., 50
Stubley, G. D., 94
Sun, L., 399
Sun, S., 243

Tamma, K. K., 141, 157
Tao, W.-Q., 243

Varanasi, C., 1

Yu, B., 243
Yu, G., 243
Yuen, W., 439

Zhou, X., 141, 157
Zielonka, A., 462
Zuo, W., 419

NUMERICAL HEAT TRANSFER

An International Journal of Computation and Methodology

PART B: FUNDAMENTALS

CONTENTS

Vol. 62 No. 1
2012

1 Numerical Schemes for the Convection-Diffusion Equation Using a Meshless Finite-Difference Method **Chandrashekhar Varanasi, Jayathi Y. Murthy, and Sanjay Mathur**

28 Parallel Computation for Radiative Heat Transfer Using the DOM in Combustion Applications: Direction, Frequency, Subdomain Decompositions, and Hybrid Methods **Damien Poitou, Jorge Amaya, and Florent Duchaine**

50 A Space-Time Meshless Method That Removes Numerical Oscillations When Solving PDEs with High Discontinuities **Tonino Sophy, Arthur Da Silva, and Ali Kribèche**

71 Development of a Moving and Stationary Mixed Particle Method for Solving the Incompressible Navier-Stokes Equations at High Reynolds Numbers **Chinlong Huang and Tony W. H. Sheu**

CONTENTS

Vol. 62 Nos. 2–3
2012

Special Issue: Papers Presented at the "Minisymposium on Computational Radiative and Convective Heat Transfer" in Honor of Professor George D. Raithby

Guest Editors: Wojciech Lipiński, Kyle Daun, Tony Straatman, and Kumar Tamma

87 Guest Editorial

89 The Impact of Dr. George Raithby's Work on Numerical Heat Transfer **Suhas V. Patankar**

94 A Simple and Efficient Isotropic Mesh Adaptation Scheme Based on Control-Volume Flux Imbalance **A. R. Baserinia and G. D. Stubley**

113 A Family of Positive Flow-Weighted Advection Schemes for Element-Based Finite-Volume Methods **Fernando S. V. Hurtado and Clovis R. Maliska**

141 GS4-1 Computational Framework for Heat Transfer Problems: Part 1—Linear Cases with Illustration to Thermal Shock Problem **S. Masuri, K. K. Tamma, X. Zhou, and M. Sellier**

157 GS4-1 Computational Framework for Heat Transfer Problems: Part 2—Extension to Nonlinear Cases with Illustration to Radiation Heat Transfer Problem **S. Masuri, K. K. Tamma, X. Zhou, and M. Sellier**

181 Further Development of the Elliptic PDE Formulation of the P_N Approximation and its Marshak Boundary Conditions **Michael F. Modest**

CONTENTS

Vol. 62 No. 4
2012

203 Phase-Function Normalization in the 3-D Discrete-Ordinates Solution of Radiative Transfer—PART I: Conservation of Scattered Energy and Asymmetry Factor **Brian Hunter and Zhixiong Guo**

223 Phase-Function Normalization in the 3-D Discrete-Ordinates Solution of Radiative Transfer—PART II: Benchmark Comparisons **Brian Hunter and Zhixiong Guo**

243 Comparative Study on Triangular and Quadrilateral Meshes by a Finite-Volume Method with a Central Difference Scheme **Guojun Yu, Bo Yu, Shuyu Sun, and Wen-Quan Tao**

264 Pressure Correction–Based Iterative Scheme for Navier-Stokes Equations using Nodal Integral Method **Neeraj Kumar, Suneet Singh, and J. B. Doshi**

CONTENTS

Vol. 62 No. 5
2012

289 Using the Finite-Volume Method and Hybrid Unstructured Meshes to Compute Radiative Heat Transfer in 3-D Geometries **Georgios N. Lygidakis and Ioannis K. Nikolos**

315 Implementation of Point-Implicit Diffusion Operator in a Moving-Particle Method (*MPPM*) **Yao-Hsin Hwang**

341 A New Numerical Approach for Predicting the Two-Phase Flow of Refrigerants during Evaporation and Condensation **I. Fayssal and F. Moukalled**

370 Grid-Free Vortex Methods for Natural Convection; Handling Source Terms and Nonlinear Diffusion **Issam Lakkis**

CONTENTS

Vol. 62 No. 6
2012

399 Application of the Immersed Boundary Method to Fluid, Structure, and Electrostatics Interaction in MEMS **Sanjay R. Mathur, Lin Sun, Shankhadeep Das, and Jayathi Y. Murthy**

419 Improvements of Fast Fluid Dynamics for Simulating Air Flow in Buildings **Mingang Jin, Wangda Zuo, and Qingyan Chen**

439 An Efficient CPU-GPU Implementation of the Multiple Absorption Coefficient Zonal Method (MACZM) **Boutros Ghannam, Maroun Nemer, Khalil El Khoury, and Walter Yuen**

462 Determination of Optimal Parameters for the Immune Algorithm Used for Solving Inverse Heat Conduction Problems with and without a Phase Change **Edyta Hetmaniok, Iwona Nowak, Damian Słota, and Adam Zielonka**

Author Index to Volume 62